

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-25. (Cancelled)

1 26. (Previously Presented) An isolation system with analog communication across
2 an isolation barrier comprising:
3 an isolation barrier circuit having at least one isolation element;
4 a digital to analog circuit configured to provide a constant average
5 analog output signal to the isolation barrier and having an input for receiving an input
6 digital signal to be communicated across the isolation barrier, said digital to analog circuit
7 including a digital to analog converter with an input for receiving said input digital signal
8 and an analog modulation circuit responsive to said digital to analog converter for providing
9 said constant average analog output signal; and
10 an analog to digital circuit having an input coupled to the analog
11 output of the isolation barrier circuit for providing a digital output signal.

1 27. (Previously Presented) The isolation system of claim 26 in which said analog to
2 digital circuit includes an analog demodulator circuit responsive to said input analog signal

3 from said isolation barrier, and an analog to digital converter responsive to said analog
4 signal to provide said digital output signal.

1 28. (Previously Presented) The isolation system of claim 26 in which said isolation
2 element includes a capacitance.

1 29. (Previously Presented) The isolation system of claim 26 in which said isolation
2 element includes a transformer.

1 30-32. (Cancelled)